

# INTERNATIONAL ENVIRONMENTAL LAW

Teaching materials

Academic Course: 2021-2022



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# Unit 9. The EU environmental policy (II)

## CONTENT

1. Supplying clean, affordable and secure energy
2. Mobilising industry for a clean and circular economy
3. Accelerating the shift to a sustainable and smart mobility



Source: European Commission

# 1. Supplying clean, affordable and secure energy

Access to energy is today an indispensable condition for our subsistence and the maintenance of our way of life. Europeans require a constant energy supply at an affordable price which allows the competitiveness of European companies that make use of this energy for the generation of products and services to be maintained. BUT:

1. The production and use of energy across economic sectors account for more than 75% of the EU's greenhouse gas emissions, so...
2. ... A power sector must be developed that is based largely on **renewable sources** (wind, oceans, solar...) complemented by the rapid phasing out of coal and **decarbonising gas**.
3. The EU's energy supply needs to be **secure** and **affordable** for consumers and businesses.

The environmental objectives of the EU are **directly addressed towards the decarbonization** of its Member States and in line with the **main commitments** established by the **Paris Agreement**

The EU has to face some problems related to energy supply inter alia:

- The increase in energy demand;
- The high economic dependence of certain EU Member States as energy suppliers of gas, i.e. Russia;
- The scarce diversification of supply sources;
- The price of energy and its fluctuations...

**SCOPE:** EU globally not only internal markets **TOWARDS:** common energy policy

## **1.1. Legal basis**

### **Article 194 of the Treaty of Functioning of the European Union (TFEU):**

*“In the context of the establishment and functioning of the internal market and with regard for the need to preserve and improve the environment, Union policy on energy shall aim, in a spirit of solidarity between Member States, to a) ensure the functioning of the energy market; b) ensure security of energy supply in the Union; c) promote energy efficiency and energy saving and the development of new and renewable forms of energy; and d) promote the interconnection of energy networks”.*

## **1.2. Specific provisions:**

- Security of supply: Article 122 of the TFEU;
- Energy networks: Articles 170-172 of the TFEU;
- Coal: Protocol 37 clarifies the financial consequences resulting from the expiry of the Treaty establishing the European Coal and Steel Community (ECSC) in 2002;
- Nuclear energy: the Treaty establishing the European Atomic Energy Community (Euratom Treaty) serves as the legal basis for most EU actions in the field of nuclear energy.



### 1.3. Current Political Framework of Energy Policy

The current policy agenda is driven by the comprehensive integrated climate and energy policy adopted by the European Council on 24 October 2014 and revised in December 2018, which sets out to achieve the following targets by 2030, it is the so-called (Climate and Energy Framework):

- A reduction of at least 40% in greenhouse gas emissions compared to **1990** levels;
- An increase to 32% of the share of renewable energies in energy consumption;
- An improvement of 32.5% in energy efficiency;
- The interconnection of at least 15% of the EU's electricity systems.

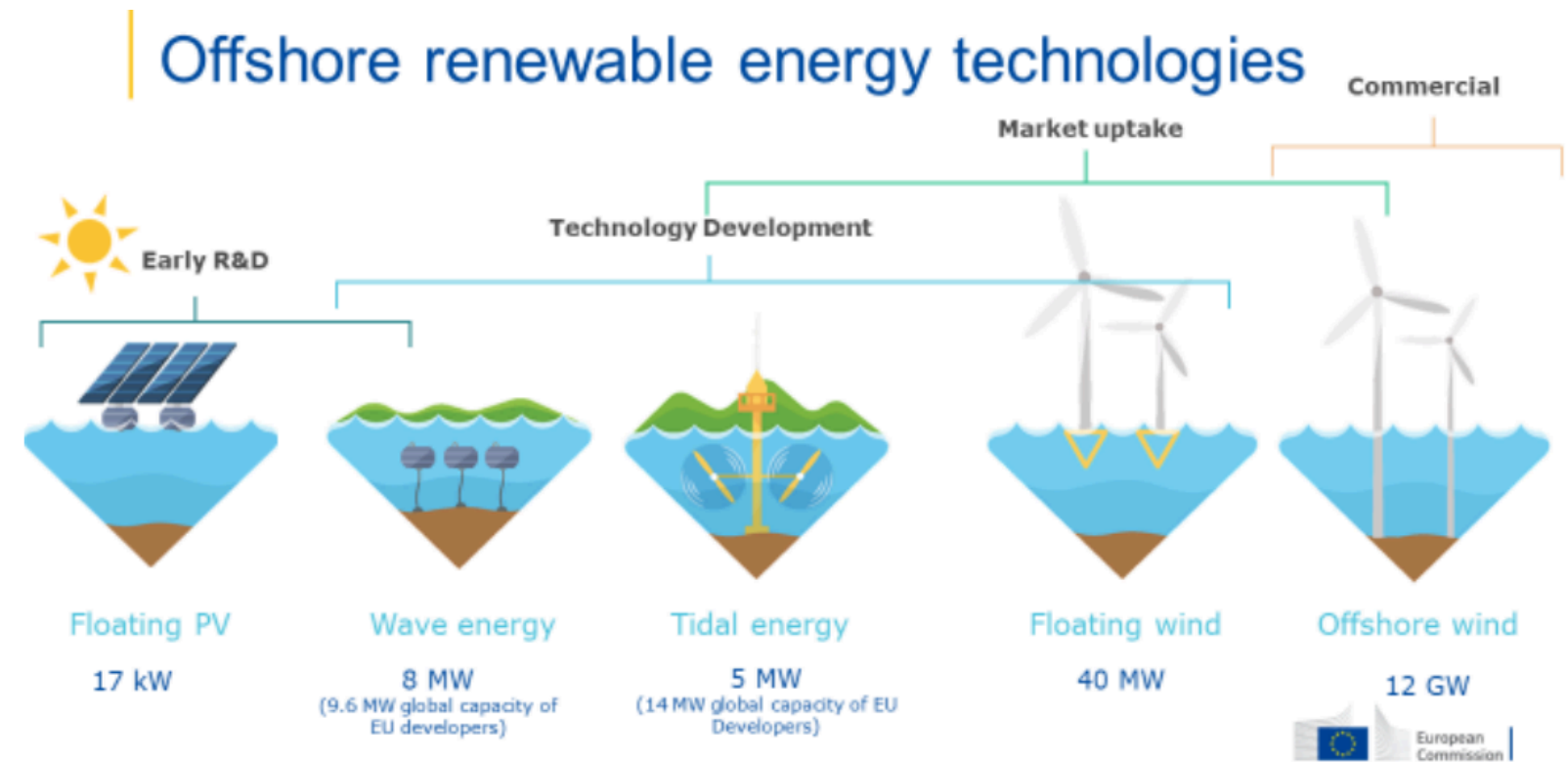
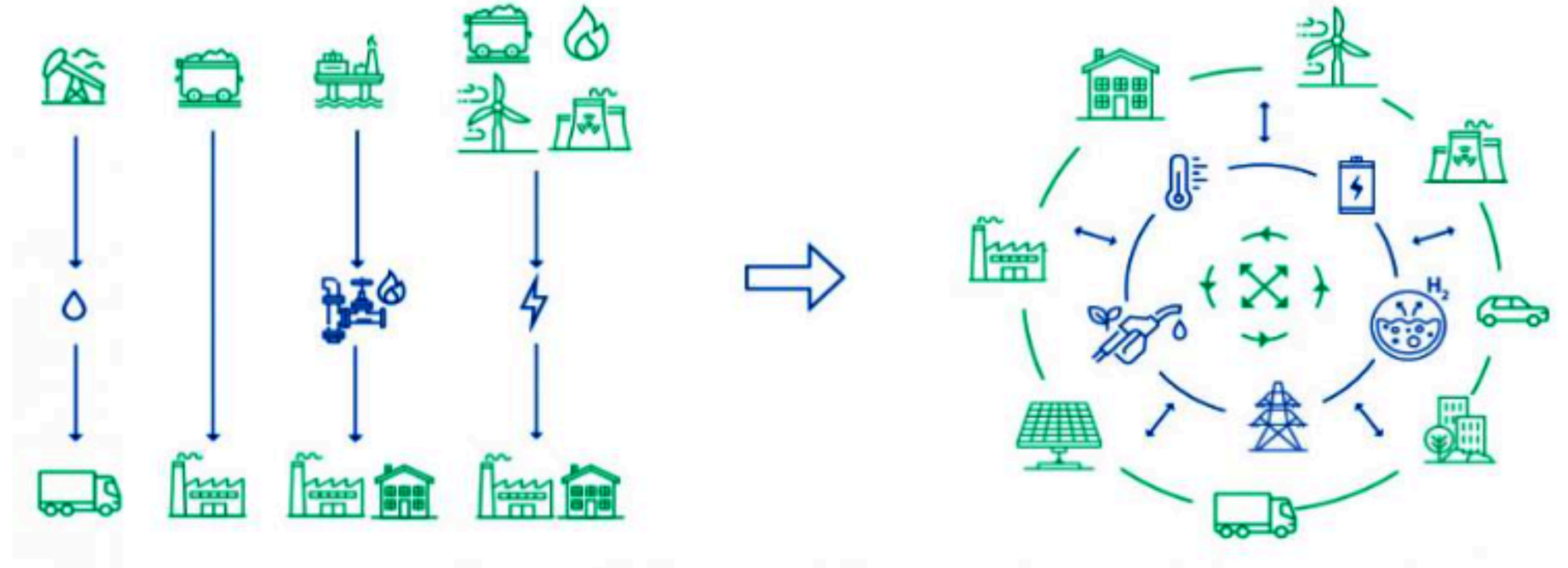
**The 50%-55% greenhouse gas target is implemented by the EU Emissions Trading System (ETS), the Effort Sharing Regulation with Member States emissions reduction targets and the Land use, land use change and forestry Regulation. In this way, all sectors will contribute to the achievement of the 50%-55% target by both reducing emissions and increasing removals.**

## 1.4. Governance

- Under the Regulation (EU) 2018/1999 on the Governance of the Energy Union and Climate Action, the EU has adopted integrated rules to ensure planning, monitoring and reporting of progress towards its 2030 climate and energy targets and its international commitments under the Paris Agreement;
- Regulation (EU) 2021/1119 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999.

# 1.5. EU Energy Strategies

1. EU Energy system integration
2. Hydrogen strategy
3. Marine renewable energies
4. Methane Strategy
5. Energy infrastructures



### **1.5.1. EU Energy System Integration**

- Our energy system is based on different parallel and vertical energy value chains related to different specific end-use sectors, i.e., transport → oil; coal and natural gas → electricity and energy heating.
- Main aim: Planning and operating the system in a unique "whole system" way, i.e. in a comprehensive manner, linking the various energy carriers, infrastructures and consumption sectors, creating stronger links between them with the aim of delivering low carbon, reliable and resource efficient energy services at the lowest possible cost to society.

### 1.5.2. EU Hydrogen Strategy

- It seems to be the solution to decarbonize the national economies.
- Hydrogen cannot be obtained isolated in the nature. To obtain it, it is necessary to carry out a process → electrolysis.
- There are different types of Hydrogen in this Strategy: “blue or green” depending on the process of acquisition.
- Main aim: replace fossil fuels by hydrogen
- Problems attached: difficulties on its production; difficulties on the transportation; high cost.

### **1.5.3. EU Renewable Marine Energy Strategy**

- Our oceans cover about 71% of the surface of the planet earth. So it is necessary to increase the capacity of our oceans and seas.
- Geographically, the EU has the power to promote the potential of the marine energies such as: floating offshore wind energy, ocean energy (wave and tidal power), floating photovoltaic installations and the use of algae to produce biofuels.
- Main aim: the Commission estimates the installation of at least 60 GW of offshore wind energy and at least 1 GW of ocean energy by 2030, with a view to reaching 300 GW and 40 GW in 2050

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- Problems attached: marine biodiversity? marine protected areas...



### 1.5.3. EU Methane Strategy

- Methane is a potent GHG. It causes more global warming than carbon dioxide.
- It is necessary to create an specific Strategy to capture the methane.
- Main aims:
  - The implementation of more accurate measurement, reporting and verification (MRV) methodologies for methane emissions by companies in the Member States;
  - The creation of an international methane emissions observatory in collaboration with UNEP, the Climate and Clean Air Coalition (CCAC) and the IEA;
  - Enhanced Atmospheric Monitoring, via *Copernicus*;
  - Review of European legislation.
  - Production of biogas or biomethane. Waste from primary sectors.

### **1.5.3. EU Regulation on trans-European energy infrastructures**

- All energy that is produced and not consumed is lost.
- This Proposal of Regulation aims to replace the current Regulation (EU) No 347/2013. It proposes as a solution the extension and upgrading of smart networks.
- Interconnected energy infrastructure planning is the basis for the exponential development of the EU's Marine Renewable Energy Strategy and the basis for reducing costs and maximising benefits among Member States.

# 2. Mobilising industry for a clean and circular economy

## 2.1. Changes in the EU industry policy

Achieving a climate neutral and circular economy requires the full mobilisation of industry.

The European Commission updated its industrial strategy in May 5th, 2021 **to ensure our industrial ambition** takes account of the new circumstances **following the COVID-19 crisis**, while ensuring European industry can lead the way in transitioning to a green, digital and resilient economy.

—> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Updating the 2020 New Industrial Strategy: Building a stronger Single Market for Europe's recovery.

Access: [https://ec.europa.eu/info/sites/default/files/communication-industrial-strategy-update-2020\\_en.pdf](https://ec.europa.eu/info/sites/default/files/communication-industrial-strategy-update-2020_en.pdf)

*“Europe has a lot to build on and a lot to learn from the testing time it continues to go through. Over the last year, we have seen the resilience of our Single Market and the best of industry. Drawing on the pool of excellence in life sciences, it has been at the forefront of global COVID19 vaccine development and production, notably thanks to the EU Vaccine Strategy and the EU support to ramp up industrial capacity. We have seen companies switch production to help meet urgent needs, whether for personal protective equipment, hand sanitisers or vaccine production. Other companies made the shift to e-commerce overnight or used digital tools to find new suppliers or supply chains. Despite a significant fall in energy demand and impacts on critical energy operators, the internal energy market adjusted well, with no interruptions in energy supply*

*However, this was not feasible for all. As lockdown forced many businesses to a halt, borders closed, supply chains were interrupted, demand was disrupted and workers and service providers found themselves unable to move across Europe”*

## **Main Objectives:**

1. **Essential need to uphold** the free movement of persons, goods, services, and capital in the **Single Market** and the need to work together to strengthen its resistance to disruptions. The free movement of services was also affected strongly, including by forced temporary closures of non-essential businesses, travel restrictions, and a lack of clarity on applicable rules on movement across borders;
2. The need to **analyse and address strategic dependencies**, both technological and industrial.
3. This unprecedented year showed that the business case for the green and **digital transition** is stronger than ever. In the medium-term, all business activity will need to become sustainable and the disruption of many traditional patterns caused by COVID-19 will shake up old habits and therefore will accelerate the green transition. Digitalisation has assumed a strategic role for the continuation of economic activities and has well and truly changed the way business is conducted

## **2.2. What is the circular economy about?**

A circular economy aims to maintain the value of products, materials and resources for as long as possible by returning them into the product cycle at the end of their use, while minimising the generation of waste. The fewer products we discard, the less materials we extract, the better for our environment.

The European Commission adopted the new circular economy action plan (CEAP) in March 2020, but due to COVID-19 this Strategy has been reviewed on May 5th, 2021. The EU's transition to a circular economy will reduce pressure on natural resources and will create sustainable growth and jobs. It is also a prerequisite to achieve the EU's 2050 climate neutrality target and to halt biodiversity loss.

Access: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021DC0350&from=ES>

**The new action plan announces initiatives along the entire life cycle of products. It targets how products are designed, promotes circular economy processes, encourages sustainable consumption, and aims to ensure that waste is prevented and the resources used are kept in the EU economy for as long as possible.**

**AVOIDANCE of “take-make-use-dispose” concept.**

## **Main Objectives:**

- make sustainable products the norm in the EU;
- empower consumers and public buyers;
- focus on the sectors that use most resources and where the potential for circularity is high such as: electronics and ICT, batteries and vehicles, packaging, plastics, textiles, construction and buildings, food, water and nutrients;
- ensure less waste;
- make circularity work for people, regions and cities;
- lead global efforts on circular economy.



# 3. Accelerating the shift to sustainable and smart mobility

## 3.1. GHG emissions within the transport sector

Transport accounts for a quarter of the EU's greenhouse gas emissions, and still growing.

Road, rail, aviation, and waterborne transport will all have to contribute to the reduction. BUT, How? putting users first and providing them with more affordable, accessible, healthier and cleaner alternatives to their current mobility habits

—> Multimodal transport needs a strong boost.

Mobility in Europe should be based on an efficient and interconnected multimodal transport system, for both passengers and freight, enhanced by an affordable high-speed rail network, by abundant recharging and refuelling infrastructure for zero-emission vehicles and supply of renewable and low-carbon fuels, by cleaner and more active mobility in greener cities that contribute to the good health and wellbeing of their citizens.

## 3.2. Milestones (I)

Various milestones are set out to show the European transport system's path towards achieving our objectives of a sustainable, smart and resilient mobility, thereby indicating the necessary ambition for our future policies, such as:

By 2030:

- at least 30 million zero-emission vehicles will be in operation on European roads.
- 100 European cities will be **climate neutral**.
- **high-speed rail** traffic will double.
- **scheduled collective travel** of under 500 km should be carbon neutral within the EU.
- **automated mobility** will be deployed at large scale.
- **zero-emission vessels** will become ready for market.

### 3.3. Milestones (II)

By 2035:

- zero-emission **large aircraft** will become ready for market.

By 2050:

- nearly **all cars**, vans, buses as well as new heavy-duty vehicles will be **zero-emission**.
- **rail freight** traffic will **double**.
- **high-speed rail** traffic will **triple**.
- the multimodal **Trans-European Transport Network** (TEN-T) equipped for sustainable and smart transport with high speed connectivity will be operational for the comprehensive network.

